

East Building, PHH-30 1200 New Jersey Avenue S.E. Washington, D.C. 20590

### Pipeline and Hazardous Materials Safety Administration

DOT-SP 14301 (EIGHTH REVISION)

EXPIRATION DATE: 2023-12-31

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: GasCon a Division of Southey

Holdings (Pty) Ltd

Cape Town, South Africa

US AGENT: Tank Services Inc.

Houston, TX

#### 2. PURPOSE AND LIMITATIONS:

- a. This special permit authorizes the manufacture, mark, sale, and use of certain UN T-50 portable tanks designed, constructed, certified, and stamped in accordance with Section VIII, Division 2 of the ASME Code 2019 Edition instead of Section VIII, Division 1. The portable tanks, mounted in ISO frames, are authorized for the transportation in commerce of Division 2.1 and 2.2 materials. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
- b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce.
- c. In accordance with 49 CFR 107.107(a), party status may not be granted to a manufacturing permit. These packaging may be used in accordance with 49 CFR 173.22a.
- 3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.

- 4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 178.274(b)(1) and 178.276(b)(1) in that tanks are designed, constructed, certified and stamped in accordance with Section VIII, Division 2 of the ASME Code and applicable Code Cases; and § 178.276(a)(2) in that a design reference temperature less than 55 °C is not authorized, except as specified herein.
- 5. BASIS: This special permit is based on the application of the GasCon a Division of Southey Holdings (Pty) Ltd dated May 26, 2020, submitted in accordance with § 107.105 and the public proceeding thereon.

# 6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Material Description			
Proper Shipping Name	Hazard Class/ Division	Identi- fication Number	Packing Group
Division 2.1 and 2.2 materials authorized in UN T-50 portable tanks.	2.1 or 2.2	As appro- priate	N/A

### 7. SAFETY CONTROL MEASURES:

- a. PACKAGING: Packagings prescribed are UN T-50 portable tanks, which are designed, constructed, certified, and stamped in accordance with Section VIII, Division 2 of the ASME Code, including all applicable ASME Code Cases. Each portable tank must be constructed in accordance with the manufacturer's drawings, specifications and calculations on file with the Office of Hazardous Materials Safety Approvals and Permits Division (OHMSAPD) and in accordance with the following requirements:
  - (1) Code: Tanks must conform to all the requirements for UN T-50 portable tanks in §§ 178.274 and 178.276 in all respects except for the design code and design reference temperature. This special permit authorizes the use of Section VIII, Division 2 of the ASME Code as the design code, including the use of ASME Code Case 2594 and ASME Code Case 2624. The design margin must be 3.0:1.

- (2) Design pressure: The design pressure must be not less than the vapor pressure of the lading, including any gas padding, at a design reference temperature of  $46.1 \, ^{\circ}\text{C} \, (115 \, ^{\circ}\text{F})$ .
- (3) Material: SA-612N or modified P460 steel to EN 10028-3 per ASME Code Case 2594.
- (4) Tank capacity and pressure: The following range of designs is authorized:

Design pressure (see Note 1)	150 psig min.; 500 psig max
Water capacity	4,500 USWG min.; 14,000 USWG max.

Note 1: The design pressure means the "Maximum Allowable Working Pressure" as used in the ASME Code.

- (5) Pressure Relief System: Each tank must be fitted as a minimum with a 76.2 mm (3 inch) minimum, spring loaded pressure relief device, set at 110% of the design pressure of the tank. A rupture disc in series with the relief valve is optional. The venting capacity requirements for each hazardous material transported must be determined by the flow formulas contained in Compressed Gas Association (CGA) Pamphlet S-1.2.
- (6) Maximum Gross Weight: 40,000 kg (88,185 lbs.)
- (7) Welded Joints: Welded joints must be 100% tested by a non-destructive testing method authorized by ASME Code.
- (8) Design Temperature Range: -40/55 °C (-40/131 °F).
- (9) G-Loadings: Vertical down 2; Vertical up 2; Longitudinal 2; Transverse 2.
- (10) Openings: Except for the opening for the pressure relief device, all openings must be grouped as described in § 178.245-1(d). Each bottom outlet valve must be provided with a shear section that meets the requirements of § 178.337-12.

- (11) Insulation: None. However, each tank must be provided with a sunshield.
- (12) Baffles: Optional.

#### b. TESTING:

- (1) Hydrostatic test certificates for each tank must be maintained by the owner and made available upon request to any representative of DOT.
- (2) A test report documenting a satisfactory ISO prototype test for each tank design must be on file with OHMSAPD prior to the first shipment.
- (3) Each tank must be inspected and tested as specified in § 180.605(c)(1) for UN portable tanks.
- (4) Repair or alteration of any tank may only be performed by a repair facility holding a valid National Board Certificate of Authorization for use of the National Board "R" stamp and must be made in accordance with the edition of the National Board Inspection Code in effect at the time the work is performed.

#### c. OPERATIONAL CONTROLS:

- (1) The pressure produced by the lading and any gas padding at 46.1 °C (115 °F) may not exceed the design pressure of the portable tank.
- (2) Each portable tank must be filled by weight in accordance with \$173.315.
- (3) Each tank must be visually inspected prior to shipment to ensure that it has not been damaged during loading.

### 8. SPECIAL PROVISIONS:

a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this special permit for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this special permit.

- b. A person who is not a holder of this special permit, but receives a package covered by this special permit, may reoffer it for transportation provided no modifications or changes are made to the package and it is offered for transportation in conformance with this special permit and the HMR.
- c. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.
- d. Each packaging manufactured under the authority of this special permit must be either (1) marked with the <u>name of</u> the manufacturer and location (city and state) of the <u>facility at which it is manufactured</u> or (2) marked with a <u>registration symbol</u> designated by OHMSAPD <u>for a specific</u> manufacturing facility.
- e. A current copy of this special permit must be maintained at each facility where the package is manufactured under this special permit. It must be made available to any DOT representative upon request.
- f. MARKING: In addition to markings specified in § 178.274(i), each portable tank must be plainly marked on both sides near the middle, in letters and numerals at least two inches high on a contrasting background, special permit number "DOT-SP 14301". Additionally, each tank must be marked with the applicable ASME Code Case on the name plate and on the Manufacturer's Data Report.
- g. MANUFACTURERS: For each manufacturer used by GasCon a Division of Southey Holdings (Pty) Ltd, the following documentation must be submitted to and acknowledged in writing by OHMSAPD prior to the first shipment in any portable tank design:
  - (1) Design drawings for each portable tank design.
  - (2) ASME Certificate of Authorization indicating a current/valid ASME "U2" stamp.
  - (3) A fatigue analysis is required for portable tanks authorized under this special permit. In the case of Class 1 vessel and Class 2 vessel a fatigue analysis is required in accordance with: Registered Professional Engineer Certified User Design Specification/Manufacturer's Design Report (ref. Annex 2A/2B of

Section VIII-Div. 2 of the ASME Code) and the required stress/fatigue analyses (ref. Mandatory Appendices 4 + 5 of Section VIII-Div. 2 of the ASME Code) for each tank design.

- (4) The Designated Approval Agency must verify compliance with all requirements of §§ 178.274 and 178.276 and UN T50 portable tank as modified by this special permit.
- (5) Except as modified herein the manufacturer and the Designated Approval Agency must meet the requirements of § 178.273.
- h. Transportation of Division 2.1 materials (flammable gases) are not authorized aboard cargo vessel unless specifically authorized in the Hazardous Materials Table (§ 172.101).
- 9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, and cargo vessel.
- 10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel or motor vehicle used to transport packages covered by this special permit.
- 11. <u>COMPLIANCE</u>: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 <u>et seq:</u>
  - o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
  - o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
  - o Registration required by  $$107.601 \text{ } \underline{\text{et seq.}}, \text{ when applicable.}$

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when this special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)- "The Hazardous Materials Safety and Security Reauthorization Act of 2005" (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 Immediate notice of certain hazardous materials incidents, and 171.16 Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:

for William Schoonover

Ryan J Ving

Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, East Building PHH-30, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at <a href="http://hazmat.dot.gov/sp app/special permits/spec perm index.htm">http://hazmat.dot.gov/sp app/special permits/spec perm index.htm</a>
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PO: LMajors/NICKS